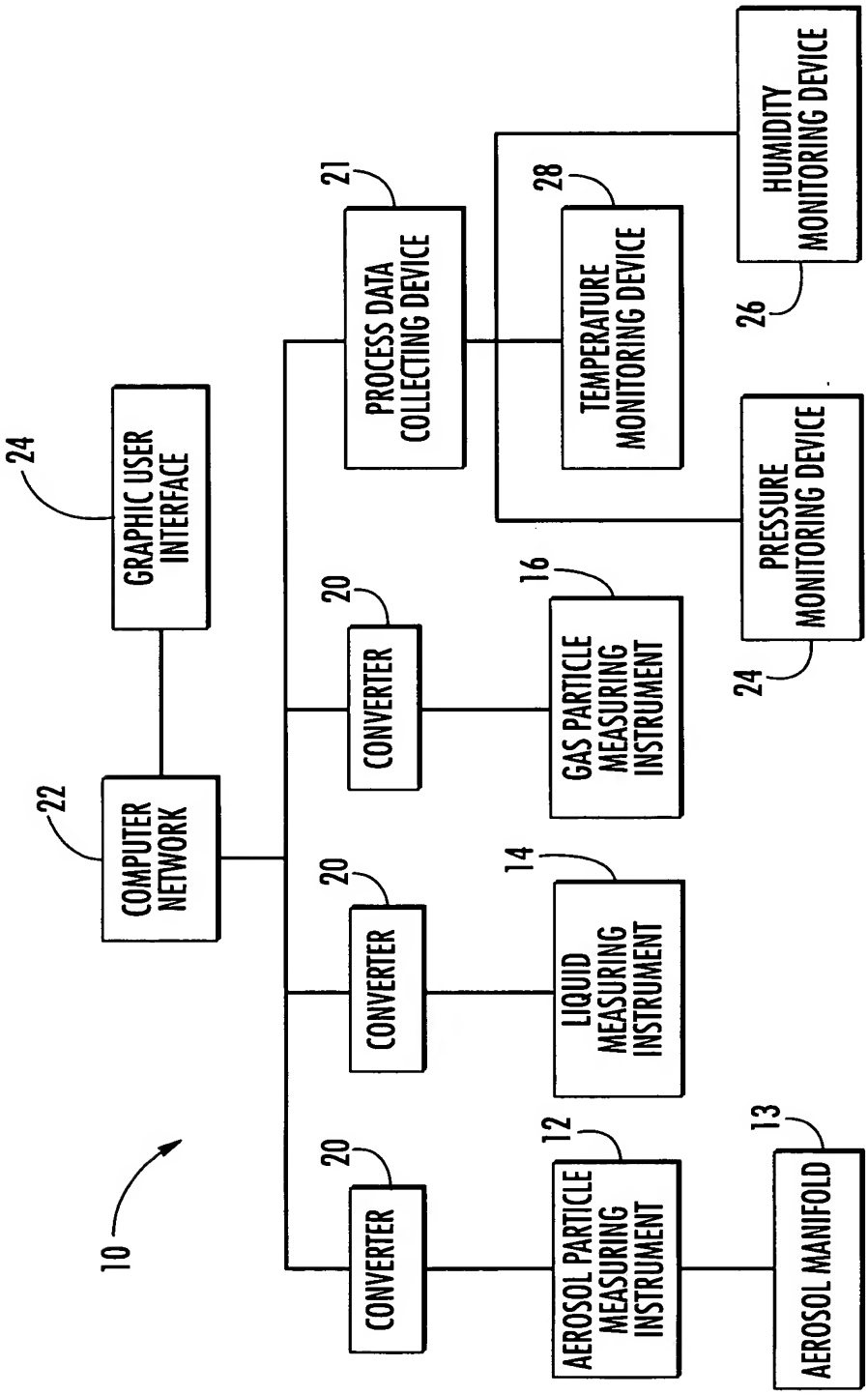
10
COMPUTER NETWORK
22
GRAPHIC USER INTERFACE
24
PROCESS DATA COLLECTING DEVICE
21
CONVERTER
20
CONVERTER
20
CONVERTER
20
GAS PARTICLE MEASURING INSTRUMENT
16
LIQUID MEASURING INSTRUMENT
14
AEROSOL PARTICLE MEASURING INSTRUMENT
12
AEROSOL MANIFOLD
13
TEMPERATURE MONITORING DEVICE
28
HUMIDITY MONITORING DEVICE
26
PRESSURE MONITORING DEVICE
24

FIG. 1

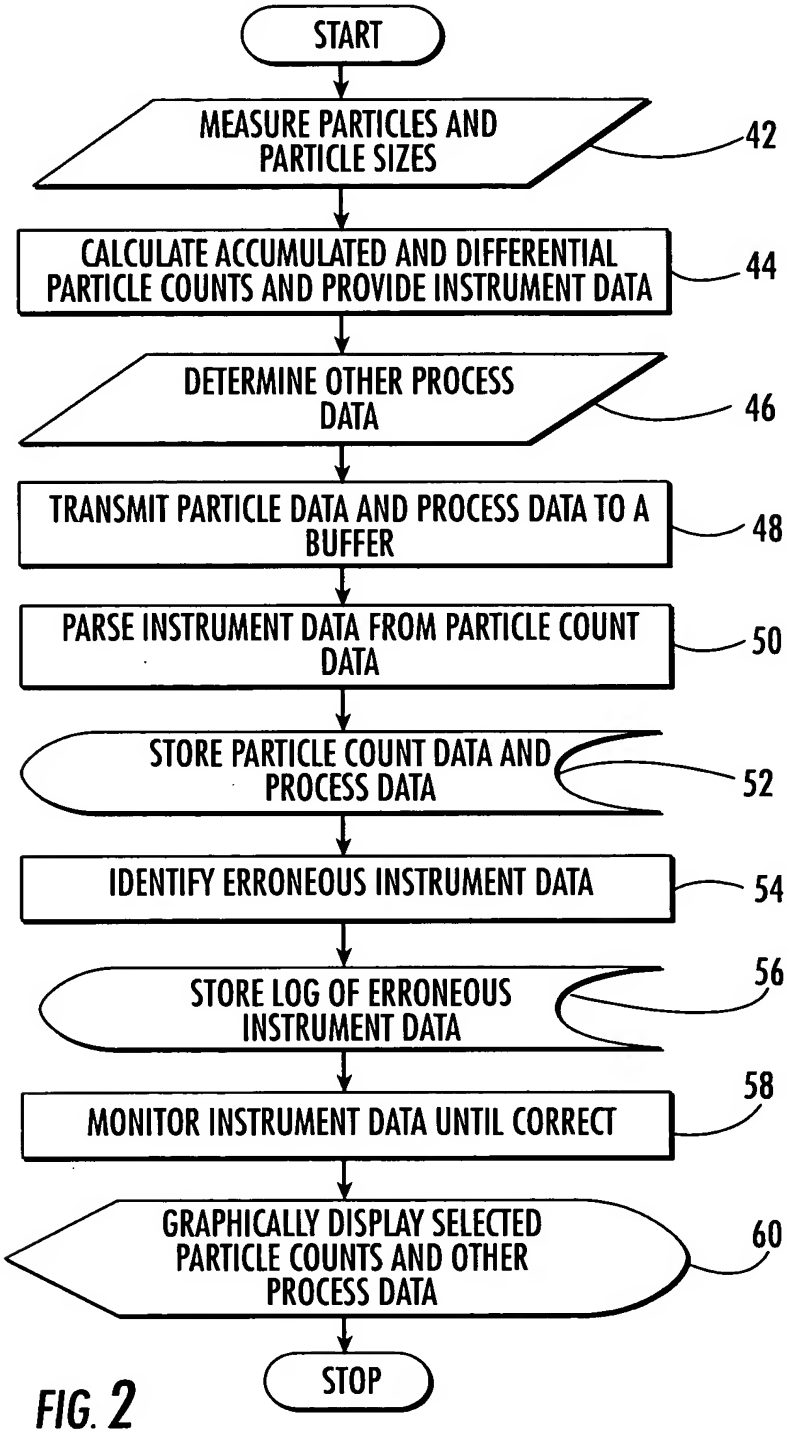
START
MEASURE PARTICLES AND PARTICLE SIZES
42
CALCULATE ACCUMULATED AND DIFFERENTIAL PARTICLE COUNTS AND PROVIDE INSTRUMENT DATA
44
DETERMINE OTHER PROCESS DATA
46
TRANSMIT PARTICLE DATA AND PROCESS DATA TO A BUFFER
48
PARSE INSTRUMENT DATA FROM PARTICLE COUNT DATA
50
STORE PARTICLE COUNT DATA AND PROCESS DATA
52
IDENTIFY ERRONEOUS INSTRUMENT DATA
54
STORE LOG OF ERRONEOUS INSTRUMENT DATA
56
MONITOR INSTRUMENT DATA UNTIL CORRECT
58
GRAPHICALLY DISPLAY SELECTED PARTICLE COUNTS AND OTHER PROCESS DATA
60
STOP

FIG. 2

PMS Driver Configuration

Main Save

Driver Configuration / Settings

Particle Counter Information:

PMS Device Information

	DEVICE NAME	IP ADDRESS	AREA	BUILDING	COM PORT	DEVICE TYPE
▶	B40 LPS	150.2.3.40	WFR	40	5	A
	AREA BLPS	150.2.3.63	CW	65	6	A
	EPI CLEANROOM	150.2.3.70	EPI	15	8	A
	AREA DLPS	150.2.3.62	PW	65	7	A
	EPI BAY 4.5	150.2.3.68	EPIR	15	9	A
*						

Differential Settings:

- ☐ 0.10 Microns
- ☐ 0.15 Microns
- ☐ 0.2 Microns
- ☐ 0.25 Microns
- ☐ 0.3 Microns
- ☐ 0.5 Microns
- ☐ 0.7 Microns
- ☐ 1.0 Microns

Accumulation Settings:

- ☑ 0.10 Microns
- ☐ 0.15 Microns
- ☐ 0.2 Microns
- ☐ 0.25 Microns
- ☐ 0.3 Microns
- ☐ 0.5 Microns
- ☐ 0.7 Microns
- ☐ 1.0 Microns

Misc Configuration:

Keep Error Logs for [5] days

Scada Node Name: [865_S3]

Record Volt / Airflow on Port #: [10]

FIG. 3

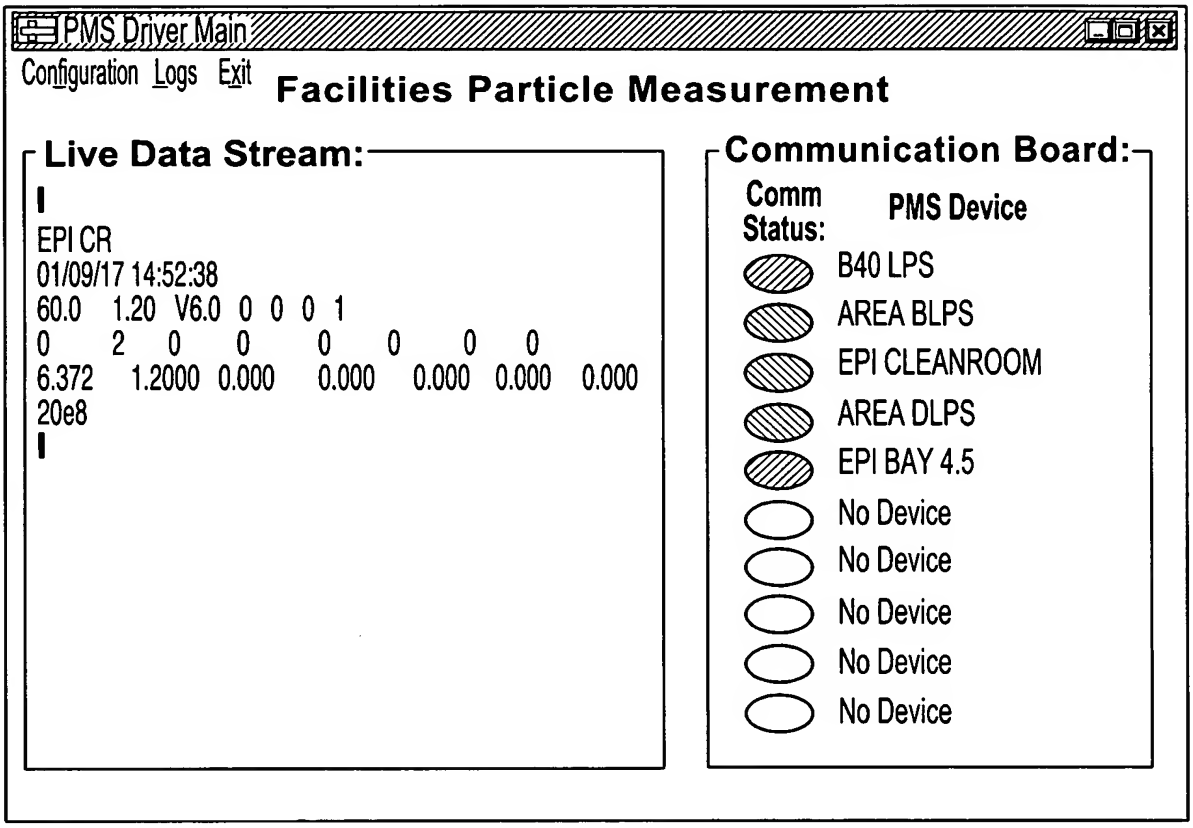
PMS Driver Main
Configuration Logs Exit
Facilities Particle Measurement
Live Data Stream:
EPI CR
01/09/17 14:52:38
60.0 1.20 V6.0 0 0 0 1
0 2 0 0 0 0 0 0
6.372 1.2000 0.000 0.000 0.000 0.000 0.000
20e8
Communication Board:
Comm Status:
PMS Device
B40 LPS
AREA BLPS
EPI CLEANROOM
AREA DLPS
EPI BAY 4.5
No Device
No Device
No Device
No Device
No Device

FIG. 4